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Revised _____

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AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.

29 West 39th Street

New York City

AMS

4015

ALUMINUM ALLOY SHEET Magnesium Chromium (Annealed)

1. **ACKNOWLEDGMENT:** A vendor must mention this specification number and its last revision in all quotations and when acknowledging purchase orders.

2. **COMPOSITION:**

Magnesium	2.2 - 2.8
Chromium	0.15 - 0.35
Manganese	0.10 max
Copper	0.10 max
Zinc	0.03 max
Iron and Silicon, Total	0.45 max
Total Other Impurities	0.10 max
Other Impurities, each	0.03 max
Aluminum	remainder

3. **CONDITION:** (a) Annealed conforming to the following physical properties:

<u>Thickness,</u> <u>inches</u>	<u>Tensile Strength,</u> <u>lb per sq in. max</u>	<u>Elongation,</u> <u>% in 2 in. min</u>
0.249 - 0.032	31,000	20
0.031 - 0.020	31,000	18
0.019 - 0.013	31,000	15

(b) The material shall not crack when cold bent flat on itself with the axis of the bend parallel to the direction of rolling.

4. **QUALITY:** The material shall be uniform in quality and temper, straight, flat, clean and smooth, free from seams, laminations, blisters and other defects. Material revealing defects during fabrication is subject to rejection.

5. **TOLERANCE:** The following variations in thickness are permissible for widths 36" and less. All dimensions are in inches:

<u>Thickness</u>	<u>Tolerance, plus or minus</u>
0.249 - 0.126	4% of thickness
0.125 - 0.092	0.0045
0.091 - 0.051	0.003
0.050 - 0.025	0.0025
0.024 - 0.016	0.002
0.015 - 0.010	0.0015

6. **REPORTS:** The manufacturer shall furnish three copies of a certified report stating that the material is within the chemical requirements. This report shall include the purchase order number, material specification number, size, and quantity. If parts are supplied, the part number shall also be included.